

# R1 – PETTERSSON D500X QUICK START GUIDE:

## Post-2013 model used for NABat

### Equipment:

Petterson D500x Bat detector and accessories  
(See the equipment list in the “Deployment Setup” document.)

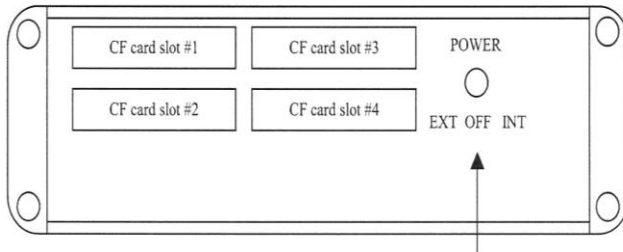
### POWER

1. Install 4 “C” batteries in the unit. Use fresh batteries for every NABat deployment.

### ADDING/REPLACING CF CARDS

1. Remove metal plate on back of D500x by unscrewing the 2 large screws. **Confirm “power” toggle switch is in the “off” (center) position.** Insert CF card(s) beginning with top left slot. Additional CF cards are added in sequence: (2) bottom left, (3) top right, and (4) bottom right. (Cards go in label up, facing you; holes on front edge of card go into the detector)

### Rear Panel Overview



2. Switch “power” toggle switch to INT for “internal power”.

*NOTE: At this point the detector will power up, “D500x” will show briefly on the screen, the “Analyzing CF Cards”, then a screen which shows the ID, size, and free space if every CF card in the unit.*

3. CF cards should be formatted and free of data when you get them from the ZIMB. If not, follow instructions for formatting cards, below.

4. DO NOT remove a CF card from the detector when it is writing data to a file. Always be sure to stop the recording session manually by pressing the

POWER button once, then again and hold it down until READY screen appears

### TO POWER D500x UP:

● Press ON/OFF key once, then press again and hold until READY screen appears.

### TO POWER D500x DOWN:

- Press ESC until READY screen appears
- Press and hold POWER button
- Press ENTER



● Press ESC one or more times to reach READY screen.

● READY screen provides access to setting and arming functions

### TO CHANGE SETTINGS:

● Press the F1 key to access list of settings. ● Press Up/Down to scroll through list. ● Press Enter to select highlighted item. ● Press Left/Right arrow keys to change value of highlighted item. ● Press ENTER to execute changes. ● Press ESC to return to previous screen.

### SETTINGS TO CHANGE DURING PROJECT:

3-Timers; 4- Time Settings.

- RELATIVE TIMERS: turn unit on and off according the sunset/sunrise times calculated from LAT/LONG settings programed in TIME SETTINGS.
- Set RELATIVE TIMER ON/OFF to match project guidelines. Timer setting uses a 24-hour clock.
- Set RTIMER1 to ON = -00:15; OFF = +00:15 run (15 minutes before sunset to 15 minutes after sunrise)

(Enabled timers show time or 00:00 in ON/OFF Columns. Disabled timers show --:-- in ON/OFF columns) ●To enable or disable, highlight timer then press ON/OFF key

**NOTE: make sure all unused timers are DISABLED!**

4. Change DATE/TIME if incorrect (**Note time is in European Format: YY/MM/DD**)

(watch detectors shared between refuges in 2 different time zones!)

5. Change ZONE (Pacific = -08, Mountain = -07)  
Change LAT and LONG to the coordinates where unit is deployed. Use Degrees, Minutes, Seconds, WGS 84. DST should be set to USA.

**NOTE: the relative timer will automatically adjust to daylight savings time, but the clock will NOT. Clock needs to be changed when the time changes**

The D500x will be sent from the Zone Inventory and Monitoring Biologist (ZIMB) with settings set to project specifications and the latest firmware installed. Settings are provided here for your information, but should not need to be changed:  
NOTE: If settings are inadvertently changed, selecting USER PROFILE 0 should reset them to project specifications.

1- USER 0: “F” = 500; “PRE” = off; “LEN” = 5; HP = YES, “Auto-record” = YES; “TS” = 4 (very low) **(Don’t confuse “USER 0 with PROFILE 0)**

2- Recording settings (will be fine-tuned during deployment). Start with:  
INPUT GAIN = 80  
TRIG LEV = 120  
INTERVAL = 0

5 DISPLAY. Recommend “OFF”, but “AUTO” can be used if you will be watching D500x to see if recording. Do not use “ON” – it will drain batteries

### **RECORDING IN THE FIELD**

●Press ON/OFF key once, then press again and hold until READY screen appears.

●Press REC. NOTE: at this time “RECORDING SETTINGS” screen will appear, allowing INPUT GAIN, TRIG LEVL, and INTERVAL to be confirmed, tested, and changed if field conditions require it.

These settings should work for most situations:

Input Gain = 80

Trig Lev = 120

Interval = 0

●If RECORDING SETTINGS are good, press ENTER.

NOTE: “SYSTEM POWER DOWN” appears briefly. Then if TIMER ON is not met, D500x is waiting and the LED under REC and ON will not blink. If TIMER ON is met, D500x is armed and the LEDS under REC and ON icons will blink.

●To stop recording manually before TIMER OFF time is met, hit then hold “POWER” button until READY screen appears

### **CARD FORMATTING**

If cards are unformatted or have data on them: follow instructions on-screen for formatting.

A potential bottle-neck in this project is the time it takes to mail CF cards to me for downloading and reformatting. Mail CF cards to ZIMB ASAP.

Place used CF cards in padded envelope and mail to my home address:

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